

CLAIMS

We claim:

1. A method of transforming a Web page, comprising:

5 receiving a copy of the Web page;

examining the contents of the Web page to identify an original link that contains a resource locator that specifies a location of a resource on a computer network;

10 replacing the original link in the Web page with a surrogate link that contains an identifier code associated with the resource locator to thereby generate a transformed Web page;

maintaining a map that relates the identifier code to the associated resource locator.

2. A method as defined in claim 1, additionally comprising:

15 sending a copy of the transformed Web page containing the surrogate link to a user

device that requested the Web page.

3. A method as defined in claim 1, wherein maintaining a map that relates the identifier code to the associated resource locator comprises maintaining a mapping table that has one or more entries, wherein each entry contains a resource locator associated with an
20 identifier code, the entries being indexed according to associated identifier codes.

4. A method as defined in claim 3, additionally comprising:

establishing a session with a user device, wherein the table is associated with the session.

5. A method as defined in claim 1, wherein the Web page is written in

HyperText Markup Language (HTML), and wherein the original links are identified by an HTML tag.

6. A method as defined in claim 1, wherein the resource locator is a uniform resource locator that specifies an Internet address of a resource located on the Internet.

7. A method as define in claim 1, wherein the surrogate link specifies a resource location different than the location specified in the resource locator.

8. A method as defined in claim 1, wherein the identifier code and the resource locator are alphanumeric strings and the identifier code alphanumeric string is smaller than the resource locator alphanumeric string.

9. A method of accessing a resource located on a computer network, comprising:
receiving a request for a resource from a user device, the request including an
identifier code associated with a resource locator that identifies the location of a resource on
the computer network;

using the identifier code to identify the resource locator that is associated with the identifier code;

submitting a request for the resource associated with the uniform resource locator, wherein the request is submitted to an address specified in the uniform resource locator.

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10. A method as defined in claim 9, wherein using the identifier code to identify the resource locator that is associated with the identifier code comprises consulting a mapping table that contains one or more entries, each entry containing an identifier code and a resource locator associated with the identifier code.

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11. A method as defined in claim 10, wherein the mapping table is indexed according to the identifier codes in entries of the mapping table.

12. A method as defined in claim 9, additionally comprising:

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receiving a copy of a Web page;

examining the contents of the Web page to identify an original link that contains a resource locator that specifies a location of a resource on a computer network;

replacing the original link in the Web page with a surrogate link that contains an identifier code associated with the resource locator to thereby generate a transformed Web

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page;

maintaining a map that relates the identifier code to the associated resource locator.

13. A system that transforms a Web page located on a computer network, the system comprising:

content processor means for executing program instructions and receiving a data set;

and

5 a network interface that permits communications between the content processor means and the computer network;

wherein the program instructions executed by the content processor means comprise

receiving a copy of the Web page,

examining the contents of the Web page to identify an original link

10 that contains a resource locator that specifies a location of a resource on a computer network,

replacing the original link in the Web page with a surrogate link that contains an identifier code associated with the resource locator to thereby generate a transformed Web page, and

15 maintaining a map that relates the identifier code to the associated resource locator.

14. A system as defined in claim 13, wherein the program instructions executed by the content processor means further comprise program instructions to:

20 send a copy of the transformed Web page containing the surrogate link to a user device that requested the Web page.

15. A system as defined in claim 13, wherein the Web page is written in HyperText Markup Language (HTML), and wherein the original links are identified by an HTML tag.

5 16. A system that accesses a resource located on a computer network, the system comprising one or more processors that execute program instructions and receive a data set, and:

receives a request for a resource from a user device, the request including an identifier code associated with a resource locator that identifies the location of a resource on the
10 computer network;

uses the identifier code to identify the resource locator that is associated with the identifier code;

submits a request for the resource associated with the uniform resource locator, wherein the request is submitted to an address specified in the uniform resource locator.

15 17. A system as defined in claim 15, wherein using the identifier code to identify the resource locator that is associated with the identifier code comprises consulting a mapping table that contains one or more entries, each entry containing an identifier code and a resource locator associated with the identifier code.

20 18. A system as defined in claim 15, wherein the processors further execute program instructions to:

receive a copy of a Web page;

examine the contents of the Web page to identify an original link that contains a resource locator that specifies a location of a resource on a computer network;

replace the original link in the Web page with a surrogate link that contains an

5 identifier code associated with the resource locator to thereby generate a transformed Web page;

maintain a map that relates the identifier code to the associated resource locator.

19. A program product for use in a computer system that executes program steps

10 recorded in a computer-readable media to perform a method for transforming a Web page, the program product comprising:

a recordable media;

a program of computer-readable instructions executable by the computer system to perform operations comprising:

15 receiving a copy of the Web page;

examining the contents of the Web page to identify an original link that contains a resource locator that specifies a location of a resource on a computer network;

replacing the original link in the Web page with a surrogate link that contains an identifier code associated with the resource locator to thereby generate a transformed Web

20 page;

maintaining a map that relates the identifier code to the associated resource locator.

20. A program product as defined in claim 19, wherein program of computer-readable instructions executable by the computer system to perform operations further comprising:

5 sending a copy of the transformed Web page containing the surrogate link to a user device that requested the Web page.

21. A program product as defined in claim 19, wherein maintaining a map that relates the identifier code to the associated resource locator comprises maintaining a mapping table that has one or more entries, wherein each entry contains a resource locator associated
10 with an identifier code, the entries being indexed according to associated identifier codes.

22. A program product for use in a computer system that executes program steps recorded in a computer-readable media to perform a method for transforming a Web page, the program product comprising:

15 receiving a request for a resource from a user device, the request including an identifier code associated with a resource locator that identifies the location of a resource on the computer network;

using the identifier code to identify the resource locator that is associated with the identifier code;

20 submitting a request for the resource associated with the uniform resource locator, wherein the request is submitted to an address specified in the uniform resource locator.

23. A program product as defined in claim 22, wherein program of computer-readable instructions executable by the computer system to perform operations further comprising:

receiving a copy of a Web page;

5 examining the contents of the Web page to identify an original link that contains a resource locator that specifies a location of a resource on a computer network;

replacing the original link in the Web page with a surrogate link that contains an identifier code associated with the resource locator to thereby generate a transformed Web page;

10 maintaining a map that relates the identifier code to the associated resource locator.

24. A method of transforming a Web document, comprising:

receiving a Web document;

examining the Web document for a uniform resource locator;

15 replacing a uniform resource locator in the document with an address that points to a surrogate server;

associating the uniform resource locator with an identifier code;

maintaining a table that maps the identifier code associated with the uniform resource locator to the uniform resource locator.

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25. A method of accessing a resource on the Internet, comprising:

receiving a request for a resource from a user device, the request including an identifier code associated with a uniform resource locator;

consulting a table that maps the identifier code to a uniform resource locator;

identifying the uniform resource locator associated with the identifier code;

submitting a request for the resource associated with the uniform resource locator, wherein the request is submitted to an address specified in the uniform resource locator.